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AMENDMENTS TO THE DRAWINGS

Attached is one replacement drawing sheet including Figs. 3 and 5 which should replace the one original drawing sheet including Figs. 3 and 5. Fig. 3 in the replacement drawing sheet is amended to change reference numeral "30" to -31--.

One Replacement Drawing Sheet

REMARKS

Favorable reconsideration of this application is respectfully requested in view of the following remarks.

Appreciation is expressed to Examiner Deuble for the indicated allowability of the subject matter recited in Claims 7 and 10-16.

With respect to the drawing objection set forth at the top of page two of the Official Action, the drawing figures have been amended together with the specification to address this point. Accordingly, withdrawal of the drawing objection is respectfully requested.

The subject matter at issue in this application pertains to a method and apparatus for changing a packaging container orientation. As a packaging container is conveyed in a filling machine, it is oftentimes desirable to change the orientation of the packaging container. The present application points out that it may be difficult to change the orientation of a moving packaging container without posing a significant risk of damage to the packaging container, particularly with respect to causing undesirable marks and the like on the decorative artwork or printing on the outside of the packaging container. Marks can occur if the packaging container contacts surrounding parts of the machinery. This can occur due to changes in velocity and direction of the movement of the packaging container, which changes can cause a traveling wave in the content of the packaging container. Marks can also be created when holding the packaging container during a change in orientation of the packaging container.

As recited in the original independent claims at issue here and as discussed in the present application, the method and apparatus effect the change in orientation

of the packaging container so that the point of gravity of the packaging container is substantially located on the geometric axis of rotation of the packaging container. One benefit associated with this is that it is possible to generally maintain the point of gravity of the packaging container at substantially the same direction of movement and speed during the change of orientation.

As recited in independent Claims 1 and 17, the packaging container is supported by finger portions of the carrier unit which bear against the corner flaps of the packaging container. This support makes it possible to in essence "grip" the packaging container without actually gripping the container. The packaging container is thus not fastened to, or held by, portions of the apparatus in the same way as other known apparatus and method that might otherwise cause undesirable marks on the packaging container. Rather, the packaging containers are simply abutted from below the corner flaps. This gives a quite careful and safe lifting and turning of the packaging container.

Independent Claim 17 here sets forth a method of changing the orientation of a packaging container in motion in a filling machine from a first orientation to a second orientation, wherein the packaging container possesses corner flaps pointing substantially straight out from sides of the packaging container. As claimed, the method involves carrying the packaging container by a carrier unit which is connected to a carrier in a conveyor, with the carrying of the packaging container comprising finger portions of the carrier unit abutting under the corner flaps of the packaging container, and turning the carrier unit in relation to the carrier about a geometric axis of rotation to change the orientation of the packaging container such that the point of gravity of the packaging container during the change in orientation is

substantially located on the geometric axis of rotation, and the point of gravity of the packaging container retains substantially the same direction of movement and speed from the first orientation to the second orientation.

Independent Claim 1 defines the apparatus for changing the orientation of a packaging container in motion in a filling machine from a first orientation to a second orientation. As claimed, the apparatus includes a conveyor provided with at least one carrier to which at least one carrier unit is connected, wherein the carrier unit comprises a pair of finger portions adapted to carry the packaging container. The carrier unit is rotary in relation to the carrier about a geometric axis of rotation and is adapted to carry the packaging container in such a manner that the point of gravity of the packaging container during the change in orientation is substantially located on the geometric axis of rotation, and the point of gravity of the packaging container thereby maintains substantially the same direction of movement and speed from the first to the second orientation. The finger portions of the carrier unit are adapted to carry the packaging container by abutting under the corner flaps.

The Official Action sets forth an anticipatory rejection of independent Claims 1 and 17, and various dependent claims, based on the disclosure in European Application Publication No. 1 123 886 to Frulio. This reference discloses how a product, needing to be transported and rotated, is placed on a carrying unit and is later packed. Figs. 5a-5d of Frulio illustrate a mechanism 44 to prevent the product from falling off the carrying unit during transportation. The product, which is not packed and which does not have any corner flaps or the like, is not engaged by finger portions of a carrier unit as claimed to change the orientation of a packaging container. Indeed, Frulio is not at all concerned with trying to avoid undesirable

marks on the decorative artwork or printing of a packaging container, and does not address such issue. Further, it would not have been possible to use the arrangement disclosed in Frulio in connection with packages such as at issue here. The mechanism 44 would likely cause damage to the visible surfaces of the packaging container. Further, it would be necessary to lift the packaging container off the carrying unit, with such lifting resulting in undesirable marks.

In the method and apparatus at issue here, the provision of the finger portions on the carrier unit which is rotated to effect the change in orientation, is advantageous in that it does not depend on the volume of the packaging container. It is possible to use the same device for packaging containers of different volumes having a common bottom format. It is possible to raise or lower the device to fit different volumes. If the bottom format is changed, only the finger portions need to be redesigned. Thus, the method and apparatus at issue here provide a high degree of flexibility in connection with an economically viable solution.

It is thus respectfully submitted that the method and apparatus at issue here as set forth in Claims 1 and 17 are patentably distinguishable over the disclosure in Frulio.

New independent Claim 20 defines the method of changing the rotational orientation of packaging containers in motion in a filling machine, wherein the packaging containers each comprise a pair of corner flaps extending substantially straight out from sides of the packaging container. The method involves engaging each of the corner flaps of one of the packaging container with a respective finger portion of a carrier unit moving together as a unit with a moving conveyor, and rotating the carrier unit moving with the conveyor while the finger portions are

engaging the corner flaps of the packaging container to rotate the packaging container from a first rotational orientation to a second different rotational orientation to effect a change in orientation of the packaging container. The rotating of the carrier unit comprises rotating the carrier unit about a geometric axis of rotation in such a manner that the point of gravity of the packaging container during the change in orientation from the first rotational orientation to the second rotational orientation is substantially located on the geometric axis of rotation.

Frulio does not disclose a packaging container orientation change method that involves engaging outwardly extending corner flaps of a packaging container with finger portions of a carrier unit moving together as a unit with a moving conveyor, and rotating the carrier unit while the finger portions are engaging the corner flaps of the packaging container to rotate the packaging container from one rotational orientation to another. Nor does Frulio disclose rotating the carrier unit about a geometric axis of rotation so that the point of gravity of the packaging container during the change in orientation is substantially located on the geometric axis of rotation.

Claim 20 is thus also allowable.

The dependent claims define additional distinguishing features and aspects of the claimed apparatus and method. Since these claims depend from allowable independent claims, a detailed discussion of the additional distinguishing aspects of the apparatus and method at issue here as set forth in the dependent claims is not discussed in detail at this time.

Early and favorable consideration of this application is respectfully requested

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Should any questions arise in connection with this application or should the Examiner believe that a telephone conference with the undersigned would be helpful in resolving any remaining issues pertaining to this application the undersigned respectfully requests that he be contacted at the number indicated below.

Respectfully submitted,

BUCHANAN INGERSOLL & ROONEY PC

Date: September 8, 2009

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I hereby certify that this correspondence is being submitted by facsimile transmission to the Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450, to the following facsimile number.

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